

THE MIGRATION OF SOLID METAL SOLUTION
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I. M. FRANTSEVYCH, ET AL.

UKRAINIAN, PER, UKRAIN FIZ ZHUR, VOL III, NO 1,
PP 64-67, NO 4, 1958, PP 552-559.

NLL M. 6357

SCI - PHYS

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V. Palovin, 4 pp.

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Lyubarskiy, 3 pp.

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Absorption of Barium Atoms and Barium Oxide
Molecules on Tungsten, by Yu. S. Vedula,
V. M. Gavriluk.

UKRAINIUM, per, Ukrainskiy Fiz. Zhur, Vol III,
No 5, 1958, pp 646-658. 9662610

ATIC MCL-39/1

Sci - Chemistry

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On the Form of Existence of Metal Film
Cathodes, by N. D. Morgulis.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol III,
No 5, 1958, pp 688-689. 9662610

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Sci - Phys, Chem

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JPRS 23510

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On the Question Regarding the Sign of
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Navy Tr 3156/NRL 890

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IT5 62 - 18092

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On Thermal Vacancies in Metals and alloys, by
S. D. Gertsiken,
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EINE NICHTKALORIMETRISCHE METHODE ZUR
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KOEFFIZIENTEN AN DEN GRENZEN METALL-
METALL UND METALL-HALBLEITER (A Non-
calorimetric Method to Measure the Relative Values of
the Peltier-Coefficient on the Boundaries Metal-Metal
and Metal-Semiconductor).

Order from TIB \$1.55

Trans. in German of Ukrayins'kyl Fizychnyl Zhurnal
(USSR) 1959, v. 4 [no. 4] p. 472-476.

DESCRIPTORS: *Calorimeters, Measurement,
*Metals, *Semiconductors, Thermoelectricity.

(Physics--Solid State, TT, v. 9, no. 11)

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Electrodiffusion in Cd and Zn, by P. P. Kuzmenko.
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DENSITIES OF SOLUTIONS OF CONDENSED GASES
Ar---CH₄, N₂---CH₄. [1963] [19]p. 11 refs.
Order from OTS or SLA \$1.60 63-19976

C

Trans. of Ukrayins'kyi Fizychnyi Zhurnal (USSR) 1959,
v. 4 [no. 5] p. 577-585.

DESCRIPTORS: *Liquefied gases, Density, *Argon,
*Methane, *Nitrogen, Molecular association, Volume,
Mathematical analysis, Solutions.

The densities of solutions of condensed gases Ar---CH₄
and N₂---CH₄ were measured. The volumes of these
solutions were found to be nonadditive. A correlation
was established between the excess volume of mixing,
on the one hand, and the energy of mixing and com-
pressibility of the solution, on the other. The experi-
mental results were compared with theoretical values,
satisfactory agreement being achieved. (Author)
(Chemistry--Physical, TT, v. 10, no. 9)

63-19976

I. Blagol, Yu. P.
II. Department of the Interior
Washington, D. C.

Dept of Interior
TN7 E57 No. 702

Office of Technical Services

On the Theory of Electrodiffusion in Metals and
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685.

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Adsorption of Barium Atoms and Barium Oxide
Molecules on Tungsten, II. by V. M. Gavriilyuk.
RUSSIAN, per, Ukr Fiz Zh, Vol IV, No 6,
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NASA TT P-10,275

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THE TITANIUM PUMP, BY I. O. GRISHAYEV, ET AL.

UKRAINIAN, PER, UKRAIN FIZ ZHUR, VOL IV,
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NLL RTS 2060

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Novikov, 29 pp.

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S. D. Gertsriken.

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JPRS 6144

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Theory of X-ray Scattering by Multicomponent
Ordered Solutions, by N.O. Krivoglaз,
O.A. Tikhonova.
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AEC RNL-tr-103

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Theory of X-Ray Scattering by Interstitial
Solid Solutions, by N. A. Krivoqiaz, E. A.
Tikhonova, 34 pp.

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Vol 5, No 2, 1960, pp 174-189. F911156067

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Study of the Fundamental Edge of X Absorption of
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Modifications, by L. G. Nikolayeva, S. M. Karal'nik.

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pp 259-269. 9689073

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EFFECT OF A MAGNETIC FIELD ON THE
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[1963] 22p. 22 refs.
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Labs. Library as Boeing Trans. R57. When supply is
exhausted, order from OTS or SLA \$2.60, 63-16550

Trans. of Ukrayinski Fizychnyi Zhurnal (USSR) 1960,
v. 5, no. 3, p. 333-344.

DESCRIPTORS: *Magnetic fields, *Diffusion, *Electric
currents, Semiconductors, Germanium, Electrons,
Hall effect, Numerical analysis.

The effect of a magnetic field on the diffusion of injected
current carriers is examined in a linear approximation
in terms of the concentration. Analytic expressions are
obtained for quantities characterizing the diffusion of
(Physics--Solid State, TT, v. 10, no. 6) (over)

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Research Labs.,
Seattle, Wash.

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Kantor, P. B., Kisil', O. M., and Fomichov, E. M.
MEASUREMENT OF ENTHALPY AND HEAT
CAPACITY OF SILICON. [1962] [5p. 6 refs.
Order from OTS or SLA \$1.10

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1960, v. 5, no. 3, p. 358-362.

DESCRIPTORS: *Silicon, Enthalpy, Specific heat,
Measurement.

The present article gives the results of measurements
of the enthalpy of silicon of the highest purity, over the
temperature interval 1148-1915°K, in the solid and
liquid phases, along with the temperature and the heat
of the phase transition. The experimental data obtained
in the work are used to find the coefficients of the
interpolation for the enthalpy, and the specific heat
capacity of silicon in the solid and liquid phases.
(Metallurgy, IT, v. 9, no. 8)

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Field 11B

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EFFECT OF CARBON AND TITANIUM ADDITIONS ON
THE ELECTRICAL CONDUCTIVITY OF SILICON
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EFFECT OF GAMMA-RADIATION ON CERTAIN
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Vlastivosti Zallza i Iogo Splaviv). 11p. (foreign text
included). 9 refs. DTC-2.
Order from OTS, ETC or DTC \$1.05 62-28789

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DESCRIPTORS: *Iron, Iron alloys, Nickel alloys,
*Magnetic properties, *Gamma rays.

(Metallurgy, TT, v. 10, no. 2)

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II. Shalaev, A. M.
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Diffusion and Electro-transport in AgZn Alloys,
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and Sb_2S_3 , by A. F. Skubenko, 15 pp.

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AEC-ORNL-TR-1739

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No. 1, 1961, pp. 24-34.

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Sci - Phys
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Sci-Min/Net
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Ejection of Plasma From an Electrodeless
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Sci - Progr

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Impurities in Solid Aluminium, by P. P. Kuz'menko. *8/90*

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Sci - Phys

Apr 63

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TECHNICAL SILICON CARBIDE AS A MATERIAL
FOR POINT-CONTACT DIODES, BY L. H.
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ET AL, 11 PP.

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FID-77-62-1267

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II., by Yu. G. Ptushinskiy, B. O. Chuykov, 5 pp.

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Sci-Mat & Met
Apr 64

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FD-41-62-1329

Sci - Phys
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Gliachuk, K. D., Litovchenko, N. M., and
Miseluk, O. G.
INVESTIGATION OF THE RECOMBINATION OF
CHARGE CARRIERS IN GERMANIUM DOPED WITH
CERTAIN IMPURITIES. III. GERMANIUM DOPED
WITH Ag AND Au. [1963] 21p. 30 refs.
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Trans. of Ukrainian [Ukrainian] Zhurnal (USSR)
1962, v. 7, no. 2, p. 152-166.

DESCRIPTORS: *Germanium, *Impurities, *Silver,
*Gold, *Semiconductors, Temperature,
*Recombination reactions, Electrons, Atomic energy
levels, Iron, Cobalt, Nickel, Reliability.

Investigations were carried out to determine depend-
ence of the life time of minority charge carriers τ
in n and p type germanium on temperature and con-
(Physics--Solid State, TT, v. 10, no. 7) (over)

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IV. Title: Germanium . . .

Office of Technical Services

Experimental Determination of the enthalpy,
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Sci - Phys
Nov 65

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